



# UNITED STATES PATENT AND TRADEMARK OFFICE

*m*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,792	10/18/2001	Guillaume Royer	S1022/8246	9624
23628	7590	05/10/2004	EXAMINER	
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			LE, UYEN CHAU N	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/831,792	ROYER, GUILLAUME	
	<b>Examiner</b>	<b>Art Unit</b>	
	Uyen-Chau N. Le	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Requesting Continued Examination (RCE)***

1. Receipt is acknowledged of the Requesting Continued Examination (RCE) filed 15 April 2004.

### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities:  
  
Re claim 8, line 4: Substitute "the opening" with -- an opening --.  
  
Re claim 8, line 6: Substitute "it" with -- the adhesive rectangle --.  
  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is

Art Unit: 2876

determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 6-7, 16-18 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Isaacson et al (US 5,708,419).

Re claims 1-3, 6-7, 16-18 and 21-23: Isaacson et al discloses a self-adhesive electronic circuit including a planar base 26 having first and second base surfaces, an antenna 22 attached on the first surface of the base 26, a chip 14 connected to the antenna 22, a double faced adhesive 94 having first and second adhesive surfaces, wherein the first adhesive surface is glued on one of the base surfaces and the second adhesive surface forms an outward adhesive surface of the self-adhesive electronic circuit (fig. 8; col. 9, line 58 through col. 10, line 25); wherein the chip 14 is glued on the first surface of the base and is connected to the antenna by connection wires 44, the wires 44 and the chip 14 being covered with a drop of resin 45 (col. 9, lines 20-33); wherein an etched surface of the chip 14 faces the first surface of the base, and the chip 14 is connected to the antenna by welding beads/pads [38, 40, 42]; wherein the base 26 is made of a flexible sheet (col. 5, lines 25+); wherein the surface of the base 26 which does not receive the double faced adhesive is provided to receive printing of a pattern (e.g., cover label 96), of a text or of a code (fig. 8; col. 10, lines 4+); the double-faced adhesive 94 having an opening/cutout, wherein at least a portion of the antenna 22 is disposed in the opening/cutout (fig. 8); the electronic chip 14 disposed at least partially in the opening/cutout and electrically coupled to the antenna 22; wherein the electronic chip is spaced from and does not contact the double faced adhesive (see fig. 8); wherein the double faced adhesive comprises a double faced adhesive tape (col. 10, lines 15+).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Launay (US 6,111,303). The teachings of Isaacson et al have been discussed above.

Re claims 4-5 and 19-20: Isaacson et al have been discussed above but fails to teach or fairly suggest that the chip is placed in a slot made through the base, the chip is connected to the antenna by welding beads located in connection slots going through the base.

Launay teaches a chip 9 being placed within a cavity/slot made through a base 1 having a surface 2; the chip 9 connecting to an antenna 4 via connection slots through the base 1 (fig. 1; col. 3, line 22+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Launay into the an electronic circuit as taught by Isaacson et al in order to provide Isaacson et al with a more compact system wherein the thickness of the card being reduced due to part of the thickness of the chip is disposed within the base via the cavity/hole.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Vieilledent (US 4,701,236). The teachings of Isaacson et al have been discussed above.

Re claim 8, Isaacson et al have been discussed above but fails to teach or fairly suggest a method of manufacturing the self-adhesive electronic circuit, wherein the attachment of the double

Art Unit: 2876

faced adhesive on the base includes the steps of: forming a rectangle of double faced adhesive including an opening, gluing the adhesive rectangle on a packaging protective film, ungluing the adhesive rectangle from the protective film, and assembling the adhesive on the base.

Vieilledent teaches a rectangular double-faced adhesive 1 provided with two protective layers 2, 3 including an opening 4; the protective layer 3 is moved and the tape 1 is glued to a base/film 5, then an IC chip 6 is mounted in a cavity 11 of the base/film 5 (figs. 2A-2D; col. 3, lines 10+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Vieilledent into the teachings of Isaacson et al because such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for better handling a double-faced adhesive tape during manufacturing process (i.e., protective layers/films prevent the tape from being glued to an undesired component and can be removed/peel-off readily without damaging the adhesive tape), and therefore an obvious expedient.

8. Claims 9-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Murohara (US 6,089,461). The teachings of Isaacson et al have been discussed above.

Re claims 9-11 and 14-15: Isaacson et al has been discussed above but fails to teach or fairly suggest that the thickness of the double faced adhesive is greater than or equal to the height of the electronic chip or the resin.

Murohara teaches a portion of an antenna 2 is disposed in the opening, which is filled with resin agent 4 and the thickness of adhesive agent 14 is greater than the height of the electronic chip 3 or the resin 4 (figs. 4-6; col. 4, lines 17-63).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Murohara into the teachings of Isaacson et al in order to improve the strength against bending and enhance the protection capability of the chip and/or antenna in the event the card is bended.

9. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al as modified by Murohara as applied to claim 9 above, and further in view of Launay (US 6,111,303). The teachings of Isaacson et al as modified by Murohara have been discussed above.

Re claims 12-13: Isaacson et al/Murohara have been discussed above but fails to teach or fairly suggest that the chip is placed in a slot made through the base, the chip is connected to the antenna by welding beads located in connection slots going through the base.

Launay teaches a chip 9 being placed within a cavity/slot made through a base 1 having a surface 2; the chip 9 connecting to an antenna 4 via connection slots through the base 1 (fig. 1; col. 3, line 22+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Launay into the an electronic circuit as taught by Isaacson et al/Murohara in order to provide Isaacson et al/Murohara with a more compact system wherein the thickness of the card being reduced due to part of the thickness of the chip is disposed within the base via the cavity/hole.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Sakumoto et al (US 5,091,251) is as of interest and illustrate to a similar structure of an apparatus and system of a self-adhesive electronic circuit.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on Mon-Fri. 5:30AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



*Uyen-Chau N. Le*  
May 03, 2004



MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800